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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/081,884 02/2		2/21/2002	Robert Hatzl	22123	9947	
535	7590	12/27/2004	EXAMINER			
THE FIRM 5676 RIVER			ALIMENTI, SUSAN C			
PO BOX 900			900	ART UNIT	PAPER NUMBER	
RIVERDALI	E (BRONX), NY 10471-09	(), NY 10471-0900		3644		

DATE MAILED: 12/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
Office Action 0	10/081,884	HATZL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Susan C. Alimenti	3644				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a rep. If NO period for reply is specified above, the maximum statutory period. Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be ti ply within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS from the cause the application to become ARANDON	mely filed ys will be considered timely. the mailing date of this communication.				
Status		`				
1) Responsive to communication(s) filed on 12 N	November 2004.					
2a) This action is FINAL . 2b) This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ⊠ Claim(s) 4,6-9,11 and 13 is/are pending in the 4a) Of the above claim(s) 4,6 and 11 is/are wit 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 7-9 and 13 is/are rejected. 7) ⊠ Claim(s) 5 and 12 is/are objected to. 8) □ Claim(s) are subject to restriction and/or	hdrawn from consideration.	- -				
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine 11.	epted or b) objected to by the l drawing(s) be held in abeyance. Sec tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicativity documents have been received in PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary					
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3/8/4</u> .	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te atent Application (PTO-152)				

Art Unit: 3644

DETAILED ACTION

Election/Restrictions

1. Claims 4, 6 and 11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 12 November 2004.

2. Applicant's election with traverse of invention I in the reply filed on 12 November 2004 is acknowledged. The traversal is on the grounds that the inventions of claims 4 and 7 have the same utility, and that the particulars of the subcombination are essential to the combination. This is not found persuasive. First, the fact that the subcombination and combination have the same utility is not relevant here. The focus for reasons of restriction is whether the subcombination has a separate utility from the combination, and as explained in the restriction requirement, it does in fact have a separate utility. Second, the particulars of the subcombination, i.e. the metal types recited for the bridgewire and the reactive layer, are not recited as being essential to the combination, as metals other than those specifically recited in claims 7, 9, and 13 could be used.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claims 5 and 12 are objected to because of the following informalities: Claims 5 and 12 appear to have been canceled or withdrawn from prosecution, however they are not listed with status identifiers in the most recent amendment submitted. Appropriate correction is required.

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Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 7, 9, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Said claims recite the limitations, "a metal" in line 4 of each claim, and "comprised of metal" in line 8 of each claim. The subject matter of the claims becomes confusing, and an antecedent basis problem arises in line 9 of each claim when "the metal" is recited.

It is suggested that if the applicant intends to define two metals in the claims they be referred to as "a first metal," and later as "a second metal."

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 7, 8 and 13 are rejected under 35 U.S.C. 102(a) as being anticipated by Baginski (WO 02/21067 A2).

Baginski discloses a pyrotechnic initiator comprising a bridgewire 106 having a reacting layer 109 formed of at least titanium and nickel (page 6, ¶ 1-2). The layer 109 is deposited on a palladium layer 126, which comprises the bridgewire 106 and may bond with the layer 126 (page

7, ¶ 2-3). Further, layer 109 is considered to "capable of" alloying with the metal, i.e. palladium, of the bridgewire 106.

Regarding claim 8 the ignition promoter is considered to be titanium.

Claim Réjections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahmberg et al. (US 4,869,170).

Dahmberg et al. (Dahmberg) discloses a pyrotechnic device comprising an initiator bridge composed of a metal such as platinum, and a reacting layer comprising aluminum. When the platinum and aluminum are alloyed, heat is released thus initiating the reaction (Dahmberg col.7, lns.21-31). While it is noted that platinum is disclosed as a layer here, it is well known for its suitability as a bridgewire material, as shown by Zeman et al. (col.2, lns.42-45). It would been obvious to one having ordinary skill in the art at the time the invention was made to make the bridgewire from platinum and coat it with aluminum for design simplicity since it is well known in the art to use platinum as a bridgewire, and such a modification would not alter the scope of Dahmberg's invention. It is further noted that such a modification would simplify the

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manufacturing process, since only an aluminum layer would need to be applied to the

bridgewire.

Conclusion

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Any inquiry concerning this communication or earlier communications from the 9.

examiner should be directed to Susan C. Alimenti whose telephone number is 703-306-0360.

The examiner can normally be reached on Monday-Friday, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Teri Luu can be reached on 703-305-7421. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SCA

SUPERVISORY

PRIMARY EXAMINER